

### CLAIMS

What is claimed is:

1. A method for determining impedance mismatch in a system simulation, comprising:
  - obtaining frequency domain transfer function for a first mismatch block connected between a first and second block;
  - computing the frequency domain transfer function of the first mismatch block;
  - inputting frequency dependent impedance of the input to the second block and the output of the first block;
  - deriving function  $G(Z1, Z2)$  so that:
$$MM12(f) = G(Zout1(f), Zin2(f))$$where the frequency domain transfer function of the first mismatch block is represented by  $MM12(f)$ ; and
  - calculating an overall transfer function for the first and second blocks from:
$$H(f) = B1(f) * G(Zout1(f), Zin2(f)) * B2(f) * G(Zout2(f), Zin3(f)) * B3(f).$$